

IN THE CLAIMS

*The status of the claims as presently amended is as follows:*

1. *(Currently Amended)* An audio output apparatus comprising:

an array speaker unit having a plurality of speaker units;

a measuring unit that measures levels of a plurality of sound signals including a first sound signal for a first sound beam to be produced by the plurality of speaker units and a second sound signal for a second sound beam to be produced by the plurality of speaker units;

a sound level adjusting unit that adjusts gains based on the measured levels so that the plurality of sound signals have equal magnitudes;

a delay unit having a first delay circuit for the first sound signal and a second delay circuit for the second sound signal; and

a directivity control circuit that controls a delay setting for each of the first and second delay circuits based on a desired focal position of each of the first and second sound beams to be directed to and a position of each of the plurality of speaker units, to emit the first sound beam from the plurality of speaker units in a first directivity for one listener and to emit the second sound beam from the plurality of speaker units in a second directivity different from the first directivity for another listener,

wherein the first sound signal is independent of the second sound signal so that contents of the first sound signal for the first sound beam is different from contents of the second sound signal for the second beam.

2. *(Previously Presented)* The audio output apparatus according to claim 1, wherein:

the measuring unit separates the plurality of sound signals into a plurality of frequency bands to measure levels thereof, and

the sound level adjusting unit assigns weights on the measured levels of the frequency bands with a predetermined weight for each of the frequency bands and adjusts the gains based on the weighted levels of the individual frequency bands so that the plurality of sound signals are in equal magnitudes.

3. (*Previously Presented*) The audio output apparatus according to claim 1, wherein:

the measuring unit separates the plurality of sound signals into a plurality of frequency bands to measure levels thereof, and

the sound level adjusting unit adjusts gains so that the plurality of sound signals are made to have equal magnitudes for each of the frequency bands based on the measured levels of the respective frequency bands.

4. (*Currently Amended*) An audio output apparatus comprising:

an array speaker unit having a plurality of speaker units;

a measuring unit that measures levels of a plurality of sound signals including a first sound signal for a first sound beam to be produced by the plurality of speaker units and a second sound signal for a second sound beam to be produced by the plurality of speaker units;

a sound level adjusting unit that adjusts gains based on the measured levels so that a level difference between at least first and second sound signals specified by ~~a viewer~~ one listener or another listener is made constant among the plurality of sound signals;

a delay unit having a first delay circuit for the first sound signal and a second delay circuit for the second sound signal; and

a directivity control circuit that controls a delay setting for each of the first and second delay circuits based on a desired focal position of each of the first and second sound beams to be directed to and a position of each of the plurality of speaker units, to emit the first sound beam from the plurality of speaker units in a first directivity for the one listener and to emit the second sound beam from the plurality of speaker units in a second directivity different from the first directivity for the another listener,

wherein the first sound signal is independent of the second sound signal so that contents of the first sound signal for the first sound beam is different from contents of the second sound signal for the second beam.

5. (*Currently Amended*) An audio output apparatus comprising:

- an array speaker unit having a plurality of speaker units;
- a measuring unit that measures levels of a plurality of sound signals including a first sound signal for a first sound beam to be produced by the plurality of speaker units and a second sound signal for a second sound beam to be produced by the plurality of speaker units;
- a compression unit that compresses a plurality of dynamic ranges of the plurality of sound signals to a predetermined value or below based on the measured levels and outputs a plurality of sound signals after the dynamic ranges are compressed;
- a delay unit having a first delay circuit for the first sound signal and a second delay circuit for the second sound signal output from the compression unit; and
- a directivity control circuit that controls a delay setting for each of the first and second delay circuits based on a desired focal position of each of the first and second sound beams to be directed to and a position of each of the plurality of speaker units, to emit the first sound beam from the plurality of speaker units in a first directivity for one listener and to emit the second sound beam from the plurality of speaker units in a second directivity different from the first directivity for another listener,

wherein the first sound signal is independent of the second sound signal so that contents of the first sound signal for the first sound beam is different from contents of the second sound signal for the second beam.

6. (*Currently Amended*) An audio output apparatus comprising:

- an array speaker unit having a plurality of speaker units;
- a frequency control unit that limits or emphasizes frequency bands of a plurality of sound signals including a first sound signal for a first sound beam to be produced by the plurality of speaker units and a second sound signal for a second sound beam to be produced by the plurality of speaker units;
- a delay unit having a first delay circuit for the first sound signal and a second delay circuit for the second sound signal controlled by the frequency control unit; and
- a directivity control circuit that controls a delay setting for each of the first and second delay circuits based on a desired focal position of each of the first and second sound beams to be directed to and a position of each of the plurality of speaker units, to emit the first sound beam from the plurality of speaker units in a first directivity for one listener and to emit the

second sound beam from the plurality of speaker units in a second directivity different from the first directivity for another listener,

wherein the first sound signal is independent of the second sound signal so that contents of the first sound signal for the first sound beam is different from contents of the second sound signal for the second beam.

7. (*Currently Amended*) An audio output apparatus comprising:

an array speaker unit having a plurality of speaker units;

a measuring circuit that measures levels of a plurality of sound signals including a first sound signal for a first sound beam to be produced by the plurality of speaker units and a second sound signal for a second sound beam to be produced by the plurality of speaker units;

a gain control circuit that refers the measured levels and sets a gain coefficient to each of the plurality of sound signals;

a sound level adjusting circuit that adjusts the levels of the plurality of sound signals based on the set gain coefficient;

a delay unit having a first delay circuit for the first sound signal and a second delay circuit for the second sound signal; and

a directivity control circuit that controls a delay setting for each of the first and second delay circuits based on a desired focal position of each of the first and second sound beams to be directed to and a position of each of the plurality of speaker units, to emit the first sound beam from the plurality of speaker units in a first directivity for one listener and to emit the second sound beam from the plurality of speaker units in a second directivity different from the first directivity for another listener,

wherein the first sound signal is independent of the second sound signal so that contents of the first sound signal for the first sound beam is different from contents of the second sound signal for the second beam.

8. (*Previously Presented*) The audio output apparatus according to claim 7, wherein the gain control unit sets the gain coefficient so that the plurality of the levels of the plurality of sound signals is nearly equal to each other.

9. (*Previously Presented*) The audio output apparatus according to claim 7, wherein the gain control unit includes an offset generating circuit that adds a certain amount of an offset amount to at least one level among the measured levels.

10. (*Previously Presented*) The audio output apparatus according to claim 7, wherein the gain control unit sets the gain coefficient so that dynamic ranges of the plurality of sound signals input to the array speaker unit are made to have a predetermined value or below.

11. (*Previously Presented*) The audio output apparatus according to claim 7, further comprising a band pass filter to which the plurality of sound signals are input to limit a frequency band thereof.

12. (*Previously Presented*) The audio output apparatus according to claim 11, wherein each of the plurality of sound signals limited in the frequency band by the band pass filter is output to the measuring circuit.

13. (*Previously Presented*) The audio output apparatus according to claim 11, wherein each of the plurality of sound signals limited in the frequency band by the band pass filter is output to the sound level adjusting circuit.

14. (*Canceled*)

15. (*Previously Presented*) The audio output apparatus according to claim 1, wherein the audio output apparatus simultaneously reproduces the first and second sound signals.

16. (*Previously Presented*) The audio output apparatus according to claim 4, wherein the audio output apparatus simultaneously reproduces the first and second sound signals.

17. (*Previously Presented*) The audio output apparatus according to claim 5, wherein the audio output apparatus simultaneously reproduces the first and second sound signals.

18. (*Previously Presented*) The audio output apparatus according to claim 6, wherein the audio output apparatus simultaneously reproduces the first and second sound signals.

19. (*Previously Presented*) The audio output apparatus according to claim 7, wherein the audio output apparatus simultaneously reproduces the first and second sound signals.

20. (*New*) The audio output apparatus according to claim 1, wherein the sound level adjusting unit adjusts gains of both the first and second sound signals in real time based on the measured levels so that the first and second sound signals have equal magnitudes.